

Military Applications Summary Bulletins report on technology developments in Europe and the Middle East. The material contained in the Bulletins should in no way be construed as an endorsement of any product or service described therein.

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Length . . . . . . . . . . . . . . . . . . 31 cm

OFFICE OF NAVAL RESEARCH EUROPEAN OFFICE Box 39, FPO New York 09510-0700 Phone (AV)235-4131 (Comm) 409-4131

Mechanical

MASB 42-89

27 July 1989

24 cm

## Second Generation Crewserved and Individual Served Weaponsights

Background. TRANSVARO Elektron Aletleri Sanayi ve Ticaret A.S. of Istanbul, Turkey, is marketing second generation crew-served and individual-served weapon sights.

Description. TRANSVARO Model 9865A (crewserved) and Model 9866A (individual served) weaponsights are lightweight, passive night vision sights using 25-mm microchannel plate intensifier tubes. The sights are easily attached to a number of different weapons for night reconnaissance. Automatic Gain Control circuitry is employed to automatically maintain the viewed scene illumination constant during periods of changing light levels allowing the operator to use the sight without having to readjust the tube gain control every few minutes during these periods. Optional features available include 5x binocular eyepieces for viewing with both eyes 35-mm SLR relay and 16-mm video relay for night photography.

Both sights operate on AA batteries, both use Automatic Brightness Control (ABC) to maintain constant illumination during periods of changing light; both have illuminated reticle with brightness control and either standard or custom designed patterns; mounts and brackets to fit specific user needs; both have manually adjustable image tube gains to compensate for levels of ambient lighting; and both use second generation 25-mm image tubes featuring muzzle flash protection.

## Specifications:

Optical	Model 9865A	Model 9866/
Magnification		X3.7
Field of view	. 9 degrees	14 degrees 30 minutes
Focus range	. 25 m to infinity	••
Objective		
Focal length	. 155 mm	95 mm
Tnumber		1.6
MTF	. 70%;40 lp/mm	70%;40 lp (nm
Eyepiece		
Focal length	. 26.5 mm	26.5 mm
Eye relief		34 mm
Diopter range		+2-5
1)	11(:	

Width		. 16 cm	12 cm
Height		. 17 cm	12 cm
Weight		. 3 kg	1.7 kg
Electrical			
Power		. 2 "AA" batteries	same
	<b>C</b>		
Battery life		. 15 hrs +	same
Environmen	tal	Model 9865A	Model 9866A
Temperature	Operating	65°F/	same
		. +115°F	same
	Non-operating	-65°F/	same
		. 115°F	same
Humidity	Operating	. 98%	same
	Non-operating	98%	same
Altitude	Operating .		same
	Non-operating	40,000 m	same
System Reso			,
100% Contrast	<b>:</b>		:
001 lux	·	. 2.5 lp/mr	1.6 lp/mr 2.8 lp/mr
1 lu	•	. 4.2 lp/mr	2.8 lp/mr
30% Contrast	:		
001 lux	•	1.9 lp/mr	1,2 lp/mr
1 (0)		. 3.5 lp/mr	2.2 lp/mr
Image Inten	sifier Tube Mo	del 3603-1 (Mode	l 9856A and
9866A Weap	onsights)		
Nominal opera	ting voltage	. 2.00 400	4 (4)
Minimum resol	lution (center) .	. 28 lp/mm ·	4
Minimum reso	lution (off center)	25 lp/mm	: "
Magnification		. 96 to 1.04	
Gain		. 30,000 min	· intermediate
Focusing Meth	od	. Electrostatic	
		. S-20 extended red	
Cathode sensit	tivity	. 240 μ <b>a/i</b> umen	
Red Response		·	
9000A		. On request	
Useful cathode	diameter	. 25 mm	

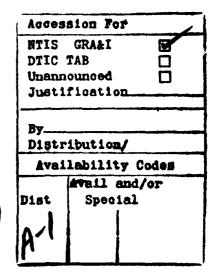
Phosphor . . . . . . . . . . . . . . . . Aluminized P-20 Equivalent background input . . 2X10<sup>-11</sup> lumen/cm<sup>2</sup>

91 3 22 099

For further information, contact TRANSVARO Elektron Aletleri Sanayi ve Ticaret A.S., Barbaros Bulvari Emlak Bloklari B\* Blok 89/2, Besiktas, Istanbul, Turkey. Telephone 158 43 34, Fax 1618050, Telex 26 221.

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